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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/799,506	02/12/97	YAMAZAKI	S 0756-1630

MM92/0926  
NIXON PEABODY LLP  
8180 GREENBORO DRIVE  
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MCLEAN VA 22102

EXAMINER

WILCZEWSKI, M

ART UNIT	PAPER NUMBER
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2822

DATE MAILED: 09/26/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**08/799,506**

Applicant(s)  
**Yamazaki et al.**

Examiner  
**M. Wilczewski**

Group Art Unit  
**2822**



☒ Responsive to communication(s) filed on Jul 17, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 80-123 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 80-123 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/330,797.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 21, 32

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Continued Prosecution Application***

The request filed on December 20, 1999, for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/799,506 is acceptable and a CPA has been established. An action on the CPA follows.

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 08/330,797, filed on October 28, 1994.

### ***Drawings***

The drawings filed on October 28, 1994, have been objected to by the Draftsperson; note the form PTO-948 attached to Paper No. 4.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 80, 81, 83, 84, 86, 87, 89, 90, 104-109, 111, and 112 are rejected under 35

U.S.C. 102(e) as being clearly anticipated by Zhang et al., U. S. Patent 5,352,291, of record.

Zhang et al. disclose an apparatus which anticipates the instant claims, see figure 2 and columns 6-7 (Example 2).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 110 and 113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U. S. Patent 5,352,291, as applied to claims 86 and 89, respectively, above, and further in view of Begin et al., U. S. Patent 5,310,410.

Claims 92-103 and 114-123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U. S. Patent 5,352,291, further in view of Begin et al., U. S. Patent 5,310,410.

Zhang et al. disclose a multi-chambered processing apparatus, as illustrated in Figure 2, in which a light irradiation chamber, heat treatment chamber and a deposition chamber are arranged in series. The apparatus also includes a chamber for discharging substrates and a transportation system for transferring substrates from one chamber to another, see columns 6-7. Zhang et al. lack anticipation only of arranging the processing chambers in a cluster and having one chamber for putting the substrate into the multi-chambered apparatus and for taking the substrate out of the apparatus and of transporting the substrate from one chamber to another using a robot arm.

Begin et al. discloses a multi-chambered apparatus in which loading chamber 26 is used to load substrates into the apparatus and transfer processed substrates out of the apparatus and in which a robotic arm is used to transport the substrate from one processing chamber to another, see figures 1 and 2 and column 5, lines 9-16. It would have been obvious to the skilled artisan in light of the teachings of Begin et al. that the various processing chambers of the multi-chambered apparatus of Zhang et al. could be arranged in a cluster using one chamber for loading and unloading substrates into and out of the apparatus and having a robotic arm located in a central chamber for transporting the substrate from one processing chamber to another, since this is a

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well known arrangement for multi-chambered apparatuses and eliminates the need for two separate chambers for loading and unloading the substrates.

Claims 82, 85, 88, and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U. S. Patent 5,352,291.

Zhang et al. is applied as supra. Although Zhang et al. do not expressly teach use of the disclosed apparatus to form a silicon oxide film, Zhang et al. do disclose that the apparatus can be used to deposit an insulating film, see column 7, lines 10-18. It would have been obvious to the skilled artisan that the apparatus of Zhang et al. could have been used to form a silicon oxide film because a silicon oxide film is an insulating film.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 105, 107, 109, 112, 115, 117, 119, and 122 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Newly submitted claims 105, 107, 109, 112, 115, 117, 119, and 122 recite that the laser light has a *linear* shape, which incorrectly implies that the laser light has only one dimension. However, in the specification, Applicants have disclosed that the laser light has a rectangular

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shape, see page 17 of the specification, lines 16-18. Therefore, claims 105, 107, 109, 112, 115, 117, 119, and 122 should be amended to recite that the laser light has a *rectangular* shape.

### ***Response to Arguments***

Applicant's arguments filed July 17, 2000, have been fully considered but they are not persuasive. Applicants have argued that although Zhang discloses a chamber for depositing an insulating film (Col. 7, lines 15-17), Zhang fails to teach, disclose or reasonably suggest that the insulating film is **a gate insulating film**. Furthermore Applicants have argued that Zhang fails to teach or suggest a chamber for depositing the insulating film **on** a semiconductor film. However, it has been well established that the intended use of an apparatus is not germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530 (CCPA 1971). The purpose to which an apparatus is to be put and any expression relating the apparatus to the contents thereof during the intended operation of the apparatus are not significant in determining the patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666 (PTO Board of Appeals 1969). Moreover, inclusion of the material worked on by an apparatus being claimed does not impart patentability to the claim, *In re Otto et al.*, 136 USPQ 458 (CCPA 1963). A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the structural limitations of that claimed, *Ex parte Masham*, 2 USPQ2d 1647 (PTO Board of Appeals 1987).

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***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Wilczewski whose telephone number is (703) 308-2771.



M. Wilczewski  
Primary Examiner  
Tech Center 2800

MW  
September 25, 2000